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ABSTRACT OF THE DISCLOSURE

A semiconductor processing method of forming a conductive gate or gate line over a substrate includes, a) forming a conductive gate over a gate dielectric layer on a substrate, the gate having sidewalls and an interface with the gate dielectric layer; b) electrically insulating the gate sidewalls; and c) after electrically insulating the gate sidewalls, exposing the substrate to oxidizing conditions effective to oxidize at least a portion of the gate interface with the gate dielectric layer. According to one aspect of the invention, the step of exposing the substrate to oxidizing conditions is conducted after provision of a first insulating material and subsequent anisotropic etch thereof to insulate the gate sidewalls. According to another aspect of the invention, the step of exposing the substrate to oxidizing conditions is conducted after provision of first and second insulating materials and subsequent anisotropic etch thereof to insulate the gate sidewalls. According to another aspect of the invention, the step of exposing the substrate to oxidizing conditions is conducted after provision and subsequent anisotropic etch of a first insulating material, followed by provision and subsequent anisotropic etch of a second insulating material.

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